UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

### NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 09/17/2009

Ira S. Dorman Brian Rogers Alves 330 Roberts Street Suite 200 East Hartford, CT 06108 EXAMINER
PAIK, SANG YEOP

PAPER NUMBER

ART UNIT

DATE MAILED: 09/17/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,411	04/12/2007	Brian Roger Alves	CES-85	7290

TITLE OF INVENTION: ELECTRICAL HEATING ARRANGEMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	12/17/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NO THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including d below or directed off tions	for transmitting the IS ig the Patent, advance nerwise in Block 1, by	SSUE FEE and PUBLICAT orders and notification of a (a) specifying a new corre	TON FEE (if requin maintenance fees wi spondence address;	ed). B ill be i and/or	Hocks 1 through 5 st mailed to the current (b) indicating a sepa	nould be completed wh correspondence address trate "FEE ADDRESS"	as for
	ENCE ADDRESS (Note: Use B	ock 1 for any change of addre	Fee	te: A certificate of n (s) Transmittal. This ers. Each additional e its own certificate of	certifi paper,	icate cannot be used f such as an assignme	r domestic mailings of or any other accompany nt or formal drawing, m	the ing
Ira S. Dorman Brian Rogers Al- 330 Roberts Stre	ves	7/2009	I be	Certi	ificate	of Mailing or Trans	mission g deposited with the Uni t class mail in an envelo above, or being facsim ate indicated below.	ted >pe nle
Suite 200 East Hartford, C	T 06108						(Depositor's nar	ne)
Lant Hardord, C	. 00.00						(Signatu	re)
							(Da	ite)
APPLICATION NO.	FILING DATE	1	FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.	٦
10/587,411	04/12/2007		Brian Roger Alves			CES-85	7290	_
TITLE OF INVENTION	ELECTRICAL HEAT	ING ARRANGEMEN						
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0		\$1810	12/17/2009	
EXAM	INER	ART UNIT	CLASS-SUBCLASS	]				
PAIK, SA		3742	219-448110	-				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach	inge of Correspondenc  "Indication form and. Use of a Custome	or agents OR, alternati	o 3 registered patent wely, le firm (having as a agent) and the name orneys or agents. If no printed.	attorn	ara 2		_
	ess an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assign pletion of this form is l	ee data will appear on the p NOT a substitute for filing an (B) RESIDENCE: (CITY	assignment.  If an assigner assignment.  If and STATE OR CO	DUNT	RY)	ocument has been filed	
4a. The following fee(s) a  Issue Fee Publication Fee (N Advance Order - #	o small entity discount j	permitted)	4b. Payment of Fee(s): (Please A check is enclosed.  Payment by credit car  The Director is hereboverpayment, to Depo	rd. Form PTO-2038 v authorized to charg	is atta	ched. required fee(s), any de		1).
	s SMALL ENTITY state	as. See 37 CFR I.27.	☐ b. Applicant is no lon	nger claiming SMALI	LENT	TITY status. See 37 Cl	R 1.27(g)(2).	_
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req ecords of the United Sta	uired) will not be acce ites Patent and Tradem	pted from anyone other than ark Office.	the applicant; a regist	tered a	ittorney or agent; or th	e assignee or other party	· in
Authorized Signature				Date				
Typed or printed name				Registration No				
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	CFR 1.311. The inform U.S.C. 122 and 37 Cl USPTO. Time will v rden, should be sent to O NOT SEND FEES C	ation is required to obtain or R 1.14. This collection is es ary depending upon the indi- the Chief Information Offic R COMPLETED FORMS T	retain a benefit by the timated to take 12 m vidual case. Any con er, U.S. Patent and T O THIS ADDRESS.	e publ inutes nment: Tradem SENI	ic which is to file (and to complete, includin s on the amount of tir ark Office, U.S. Dep D TO: Commissioner	by the USPTO to proce g gathering, preparing, s ne you require to compl artment of Commerce, P for Patents, P.O. Box 14	ss) ind ete .O. 50,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/587,411	04/12/2007	Brian Roger Alves	CES-85	7290	
7590 09/17/2009 EXAMINER					
Ira S. Dorman			PAIK, SANG YEOP		
Brian Rogers Alves			ART UNIT	PAPER NUMBER	
330 Roberts Street Suite 200 East Hartford, CT		3742 DATE MAILED: 09/17/200	9		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 462 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 462 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/587,411 ALVES ET AL. Notice of Allowability Examiner Art Unit SANG Y PAIK 3742 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to . The allowed claim(s) is/are 1-8,11-17,19,24-26,31,32,35 and 38-40. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) 🔯 All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \( \overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. ☐ Examiner's Amendment/Comment Paper No./Mail Date 7/27/06 8. X Examiner's Statement of Reasons for Allowance 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material 9. ☐ Other . /SANG Y PAIK/ Primary Examiner, Art Unit 3742

Application/Control Number: 10/587,411 Page 2

Art Unit: 3742

## REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: the claimed
invention is allowed over the prior art of record because the prior art does not shows the
recited claim elements in combination with the thermal insulation means interposed
between the recited lower surface of the substrate and the support member only at the
recited first region of the substrate.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McWilliams (US 2003/0178405), McWilliams (US 7,030,342f), Wilkins (US 6,940,048), and McWilliams (US 6,995,344).
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANG Y. PAIK whose telephone number is (571) 272-4783. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/587,411 Page 3

Art Unit: 3742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SANG Y PAIK/ Primary Examiner, Art Unit 3742